

# Organics Collection in Minneapolis



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# Outline

1. What are organics?
2. Why collect organics?
3. Pilot Projects
4. Organics Collection Study – Foth
5. City-Wide Organics Cost Variables & Barriers
6. Partnership with Minneapolis Park and Recreation Board for Organics Drop-Offs
7. Comments and Questions

# What are source-separated organics?

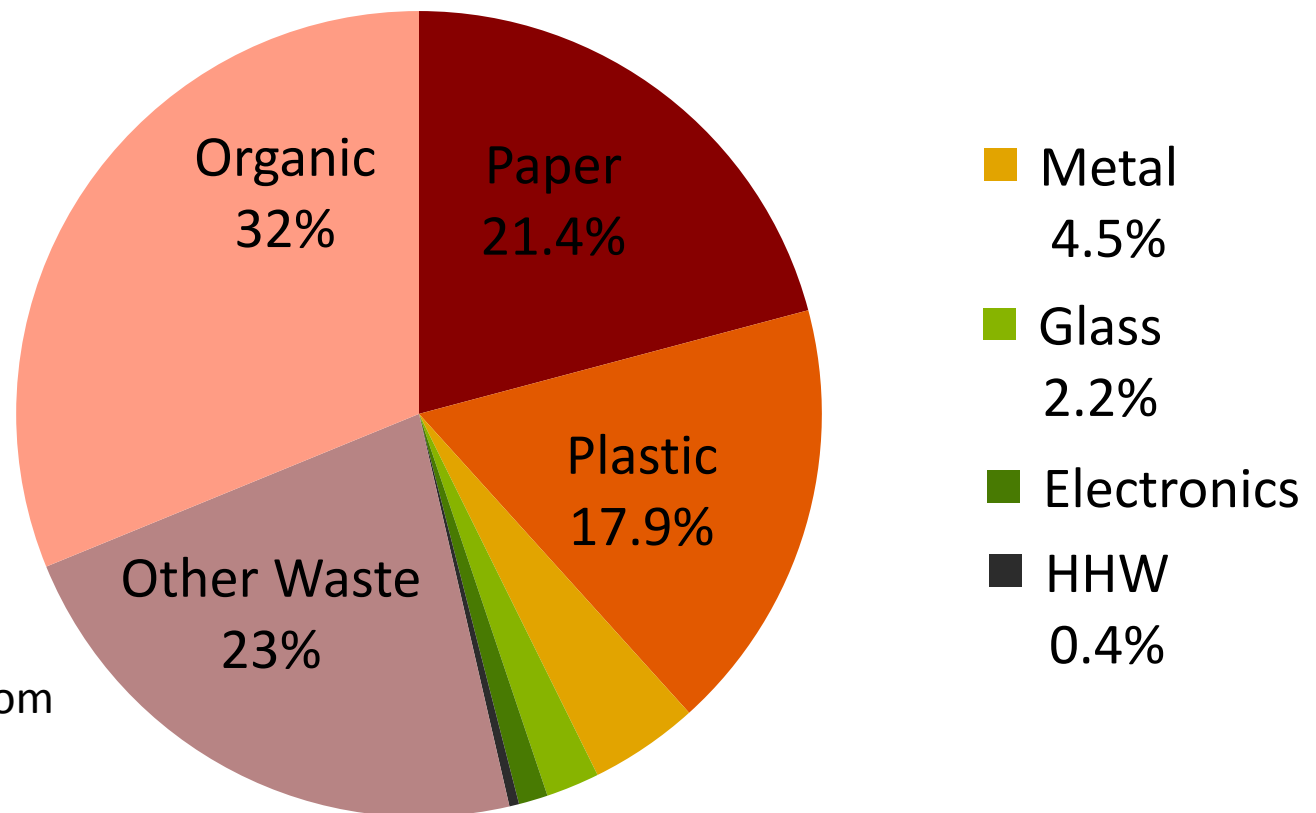
- Food waste  
(including meat, bones & dairy)
- Most non-recyclable paper
- Certified compostable plastics
- Plant waste
- Other items  
(cotton swabs, q-tips, coffee filters, wax paper, dryer lint, vacuum bags, etc.)



SSO = source-separated organics

# Why collect organics?

**Organic materials make up as much as 32% of what Minnesotan's throw in the garbage!**



Source: Data Modified from  
2013 MPCA Waste  
Characterization Study

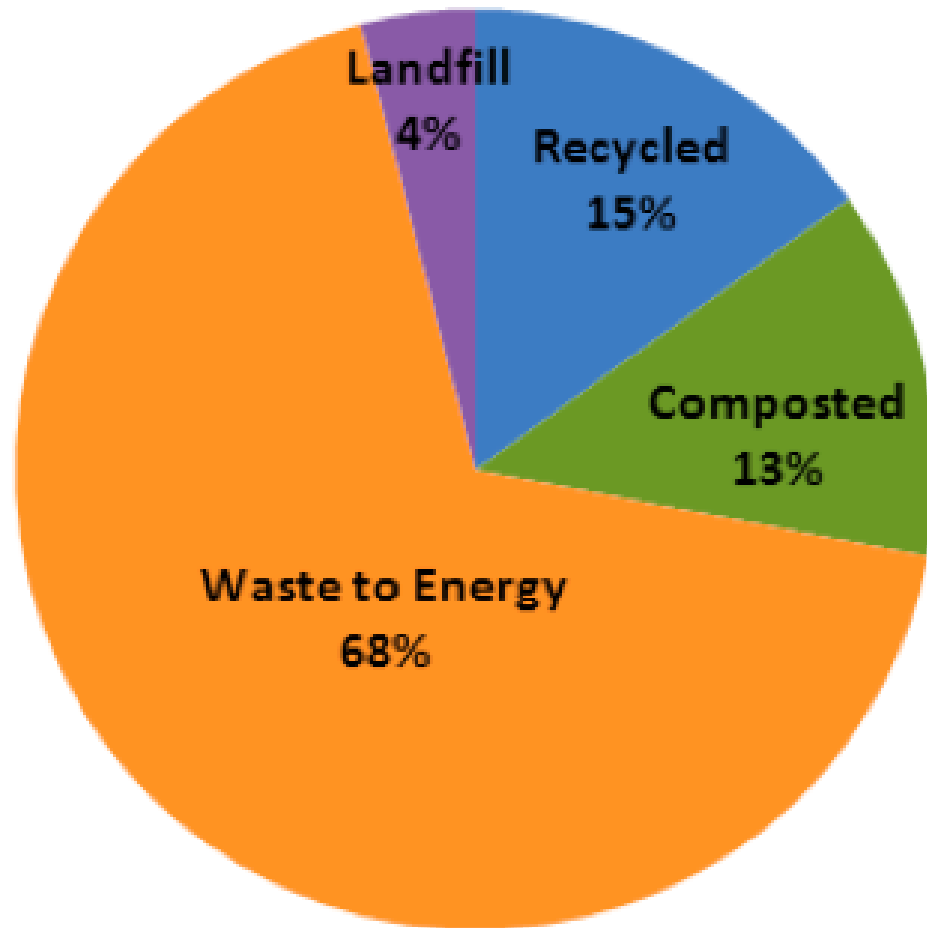
# 32% Organics in Waste Stream



Organic Material Type	Mean Percentage
Food Waste	17.8%
Wood*	5.7%
Yard Waste	2.8%
Compostable Paper	3.4%
Non-recyclable Paper	2.3%
Compostable Plastics	0.0%
<b>Total</b>	<b>32%</b>

\*Wood includes treated wood that is not suitable for composting.

# 2012 Minneapolis Waste



**13% Composted:**

**97% Yard Waste**  
(16,967.11 Tons)

**3% Organics from Pilots**  
(476.04 Tons)

# How Pilots Began

- Linden Hills Power & Light received a grant to hire a contractor to assess the feasibility of community anaerobic digester study for the neighborhood in 2007.
- Study showed approximately 45% of Linden Hills non-recyclable waste qualified as SSO.
- Community digester was not feasible for the neighborhood due to financial costs of acquiring land, construction cost, etc.
- Linden Hills Neighborhood, Linden Hills Power & Light, and Hennepin County approached the City to conduct a residential SSO pilot collection program in the neighborhood.

# Goals of Pilot Projects

- Test “opt-in” system
- Determine participation levels
- Effectiveness of mailings, neighborhood events, and “block captains”
- Route design and efficiencies





# Pilot Project Timeline

2008 Linden Hills Neighborhood pilot began in September.

Encouraged Participation through:

- Door knocking
- Block Captains
- Cart Hangers
- Neighborhood events
- Mailings



2009 East Calhoun Neighborhood added.  
Used mailings only to promote pilot.

2010 Garbage routes selected for expansion that included part of the following neighborhoods: Cooper, Hiawatha, Howe, Longfellow, Phillips, and Seward.  
Direct mailings were used to encourage participation.

# Pilot Area Comparison

<b>Participation Data</b>	<b>Linden Hills</b>	<b>ECCO</b>	<b>2010 Expansion</b>
<b>Outreach Methods</b>	Mailings, Events, & “Block Captains”	Mailings Only	Mailings Only
<b>Option to Participate (# of Dwelling Units)</b>	2,524	566	2,280
<b>Neighborhood Subscription</b>	53.5%	46.8%	36.7%
<b>Average Weekly Cart Set Out Rates of Subscribers</b>	60%	54%	n/a
<b>Average pounds of SSO per dwelling unit per week from interim report</b>	7.71—11.01	9.07—12.95	n/a

# Results from Current Pilot Projects

- “Opt-in” program offered at no additional charge can effectively generate interest and results in collecting SSO for composting.
- The cost to collect SSO separate from yard waste and garbage is not recuperated simply by the reduced tipping fee for organic materials.
- Collecting organics separate is 2.5 times more costly than collecting SSO with garbage and delivering to a waste to energy facility.

# Organics Collection Study

February 2013

Foth LLC hired to prepare report

Report details different options and impacts of organics collection methods.

- Identify most feasible collection options for SSO
- Cost for collection
- Participation rates
- Greenhouse gas emissions
- Obstacles and barriers to going city-wide

October 2013

Report presented to Minneapolis  
Transportation & Public Works Committee

# Collection Methods Studied

1. No SSO Collection
2. Collect SSO Alone
3. SSO Commingled with Yard Waste
4. SSO Co-Collected with Yard Waste
5. SSO Co-Collected with Garbage

## Definitions:

**Commingled:** Placed together in the cart with no bag required.

**Co-Collected:** Organics contained in compostable bag that is placed in a cart with yard waste or garbage. Intention of co-collection is to be able to separate organics from yard waste or garbage to process appropriately.

# Collect SSO Separately (Current Pilots)



## **Yard Waste**

(Own containers & compostable bags)



## **Organics Cart**

(30 gallon or 64 gallon)



## **Recycling Cart**

(96 gallon or 64 gallon)



## **Garbage Cart**

(96 gallon or 26 gallon)

# SSO Co-Collected OR Commingled with Yard Waste



**Organics Cart**  
(64 or 90 gallon)



**Recycling Cart**  
(96 gallon or 64 gallon)



**Garbage Cart**  
(96 gallon or 26 gallon)

# Current Program Containers OR Co-Collect SSO with Garbage



**Yard Waste**  
(Own containers & compostable bags)



**Recycling Cart**  
(96 gallon or 64 gallon)



**Garbage Cart**  
(96 gallon or 26 gallon)



# Incremental Cost Estimates

SSO Collection Option	\$ per DU per month
Collect SSO alone (with County tip fee subsidy)	\$2.23
Collect SSO alone (without any County tip fee subsidy)	\$2.54
SSO commingled with yard waste (no Blue Bag™)	\$2.52
SSO co-collected with yard waste (SSO within a Blue Bag™)	\$5.12
SSO co-collected with regular trash (SSO within a Blue Bag™)	\$7.76

# Key Cost Variables

- Carts
- Bags, liners, kitchen pails
- Dedicated SSO route vs. collected with yard waste or garbage
- Hennepin County subsidy  
(tipping fee at Brooklyn Park Transfer Station)
- Loss of Hennepin County subsidy and cost of grinding commingled SSO and yard waste (if commingled option selected)
- Cost of infrastructure improvements needed to separated co-collected materials.

# Other Barriers to City-Wide Collection

- MDA - Emerald Ash Borer (EAB) Quarantine
  - April – October each year yard waste needs to be ground before leaving the quarantine zone (Hennepin & Ramsey Counties).
- MPCA - Compost Siting & Design Rules
  - MPCA will public notice new rules governing siting and design of compost facilities in late December 2013.
  - Changes to rule will add a middle tier for combined SSO and yard waste composting.
  - It is anticipated that many new sites that can accept SSO will open following the rules completion.
- Composter site operators prefer to keep SSO and yard waste separate to create a higher quality compost product.

# Incremental GHG\* Estimates

SSO Collection Option	Increased MTCO <sub>2e</sub> **
SSO alone	288
SSO with yard waste	15
SSO co-collected with garbage	33

\* GHG = Greenhouse Gas

\*\* MTCO<sub>2e</sub> = metric tonnes of carbon dioxide equivalents

# Next Steps

- Consider implementing drop-off sites while we figure out solutions to some of the barriers.
- Educate new Council on organics collection.
- Discussions with Hennepin County regarding subsidy on tipping fee and SSO policies and programs.
- Obtain feedback from residents on preferred collection method.
- Determine collection method, assess current SW&R fee structure and begin implementation plan.

# Organics Drop-Offs

- Idea came from Tangletown, Hale, Page, and Diamond Lake Neighborhoods with support from Council Member Quincy
- Minneapolis Park and Recreation system was built so all residents would have access to parks.
- Minneapolis Solid Waste & Recycling is pursuing the possibility of partnering with Minneapolis Park and Recreation Board to sponsor drop-off locations at park buildings.
- Details that need to be addressed:
  - When and how residents will have access to the drop-off sites
  - How to monitor participation rates, weights of organics dropped off, cost of the program, etc.
  - Requirements on how organics can be placed in carts

# Possible Drop-Off Sites

- Touring 12 potential drop-off sites throughout the City with Park Board staff tomorrow.
- Sites in/near Tangletown, Hale, Page, and Diamond Lake neighborhoods that are being considered:
  - Fuller Park
  - Pearl Park
  - McRae Park

# SW&R Service Costs

- Base Fee: \$17.00 (per dwelling unit)
  - Covers: Garbage, recycling, yard waste, voucher program, and bulky/large item collection costs.
- Weekly Garbage Collection:
  - Small 26 gallon cart - \$2.00 per cart
  - Large 96 gallon cart - \$5.00 per cart
- Every other week Recycling Collection:
  - No additional fee. Customers may have as many recycling carts as they need.

*\*Fees are subject to change with the addition of city-wide organics collection.*



# Questions or Comments



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